### Critical Thinking: The Art of Socratic Questioning, Part III

#### By Richard Paul and Linda Elder

In the last two columns we introduced the concept of Socratic questioning and its relationship to critical thinking. We illuminated how understanding the concepts embedded in critical thinking naturally generates questions. For example, a thinker who understands the elements of thought asks questions which probe the parts of thinking. A thinker who understands the role of intellectual standards in disciplined reasoning asks questions that target the assessment of thinking. A thinker who understands the need for students to connect learning to their lived experiences gives numerous examples of questions that can be used everyday to foster student engagement.

In this column, we focus on the formal mechanics of Socratic questioning. We distinguish three general categories of Socratic questioning: spontaneous, exploratory, and focused. Each of these modes of questioning represents orientations one can adopt in cultivating student thinking. All three require skill in questioning. All three require the instructor to pick from among a wide variety of intellectual moves. All three require judgment in determining when to ask which kind of question. Of course, at any given time, there is no one best question, just better or worse ones.

#### **Spontaneous or Unplanned**

The key to success here is entering or adopting the Socratic spirit; this occurs when one becomes genuinely curious, truly wondering what students are and are not thinking. Once curiosity is aroused there will be many occasions in which to spontaneously ask students questions that probe their thinking and many opportunities to question what is happening in their minds. The Socratic spirit wants them to become concerned with intellectual standards, with whether or not what they think is true or false, logical or illogical, reasonable or unreasonable.

If a student says that a given angle will be the same as another angle in a geometrical figure, one may spontaneously question how the class might go about proving or disproving this assertion. If a student says, "Americans love freedom," the instructor may spontaneously wonder aloud about what such a statement might mean. (Does that mean that Americans love freedom more than other people do or that they live in a free country? What would it mean to live in a free country? Does "freedom" mean the same thing to all Americans?) If a science student says that most space is empty, one may spontaneously ask a question as to what that might mean; how might it be possible, together, to discover an answer?

Such spontaneous discussions provide models of listening critically as well as exploring the beliefs expressed. If something said seems questionable, misleading, or false, Socratic questioning provides a way of helping students become self-correcting, rather than relying on correction by the instructor. Spontaneous Socratic discussion can prove especially useful when students become interested in a topic; when they raise an important issue; when they are on the brink of grasping or integrating a new insight; or when discussion becomes bogged down, confused, or hostile. Socratic questioning provides specific moves which can fruitfully take advantage of student interest. It can help instructors effectively approach an important

issue. It can aid in integrating and expanding an insight, move a troubled discussion forward, clarify or sort through what appears confusing, and diffuse frustration or anger.

Although by definition there can be no preplanning for a particular spontaneous discussion, becoming familiar and comfortable with generic Socratic questions, developing the art of probing with follow-up questions, and responding in encouraging and helpful ways all assist preparation. Consider the following potential "moves":

#### Spontaneous Socratic Questioning "Moves"

- Ask for an example of a point a student has made or of a point you have made.
- Ask for evidence or reasons for a position.
- Propose a counter-example or two.
- Ask the group whether they agree.(Does everyone agree with this point? Is there anyone who does not agree?)
- Suggest parallel or similar examples.
- Provide an analogy that illuminates a particular position.
- Ask for a paraphrase of an opposing view.
- Rephrase student responses clearly and accurately.

In short, when mentors begin to wonder more and more about meaning and truth, and so think aloud in front of students by means of questions, Socratic exchanges will occur at many unplanned moments during instruction. However, in addition to these unplanned wonderings, one can also design or plan out at least two other distinct kinds of Socratic discussion: one that ranges widely and one that focuses on one particular issue. Consider these two modes of questioning now, beginning with the "exploratory" mode.

#### **Exploratory**

What we call exploratory Socratic questioning is appropriate in order to find out what students know or think on a variety of issues. For example, it can be used to assess student thinking on a subject at the beginning of a semester or unit. It can be used to explore student values or to uncover problematic areas or potential biases. It can be used to identify where students are clear and where they are fuzzy in their thinking.

Instructors can use exploratory Socratic questioning to discover areas or issues of interest or controversy or to find out where and how students have integrated academic material into their thinking (and into their behavior). It is also useful in introducing a subject, preparing students for later analysis of a topic, or reviewing important ideas before students take a test. This questioning can help determine what students have learned from their study of a unit or topic or as a guide to future assignments.

After an exploratory dialogue, students could take an issue raised in discussion and develop in writing their own views on the issue. Or students might be asked to form groups to further discuss the issue or topic.

This type of Socratic questioning raises and explores a broad range of interrelated issues and concepts, not just one. However, for the greatest success some preplanning or prethinking is helpful. For example, one could construct a list of possible questions to ask at some point in the discussion. Another preparation technique is to predict students' likeliest responses and frame some follow-up questions. Remember, once students' thought is stimulated there is no predicting exactly where the discussion might go. Skilled Socratic questioners should make sure that, wherever the discussion goes, it gets there in an intellectually disciplined way.

#### **Exploring Important Concepts**

In exploratory discussions instructors can use the following types of questions to foster students' conceptual abilities and to help students begin to take ideas seriously. These are just a few of many possible examples:

- What is an intimate relationship? Why do people have intimate relationships? What is the difference between an intimate relationship and a friendship? What is the difference between an intimate relationship and a romantic attachment?
- What is the difference between wanting something and needing it?
- What is ethical thought? How does it differ from other modes of thought like social conventions, religion, and the law? What are some important implications of people confusing these modes of thought?
- What is a democracy? What does the concept imply for people living within the democracy? What is a plutocracy? Can you have a true democracy in a country where those with more money have more power than those with less money?
- What is education? What is the difference between education, indoctrination, socialization, and training?

#### **Focused**

Much of the time instruction is focused on specific topics, specific issues, and specific content, all part of the curriculum. At any point in that curriculum, one might use focused Socratic questioning. Here are some possibilities: probe an issue or concept in depth; clarify, sort, analyze, and

evaluate thoughts and perspectives; distinguish the known from the unknown; synthesize relevant factors; and construct knowledge. Focused Socratic discussion intellectually stimulates students to think through a variety of perspectives. It can stimulate them to explicitly express their most basic assumptions. It can encourage them to consider implications and consequences.

Focused Socratic discussion gives students experience in engaging in an extended, ordered, and integrated dialogue in which they discover, develop, and share ideas and insights. It requires preplanning; therefore, instructors need to do some prethinking about what they want students to think through: possible perspectives on an issue; grounds for conclusions; problematic concepts, implications, consequences; and so forth. It may be important for students to reflect on facts relevant to an issue, relevant intellectual standards, basic distinctions and concepts, or points of overlap or possible conflict. Insofar as it is possible, it is useful to anticipate student responses to questions.

#### Conclusion

All three types of Socratic discussion we have discussed require instructors to become more skilled over time in of the art of questioning. They require the instructor to develop familiarity with a wide variety of intellectual moves. The cultivation of critical thinking can be enhanced by adapting spontaneous or unplanned, exploratory, and focused modes of orientation and applying the formal mechanics of Socratic questioning within each mode.

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